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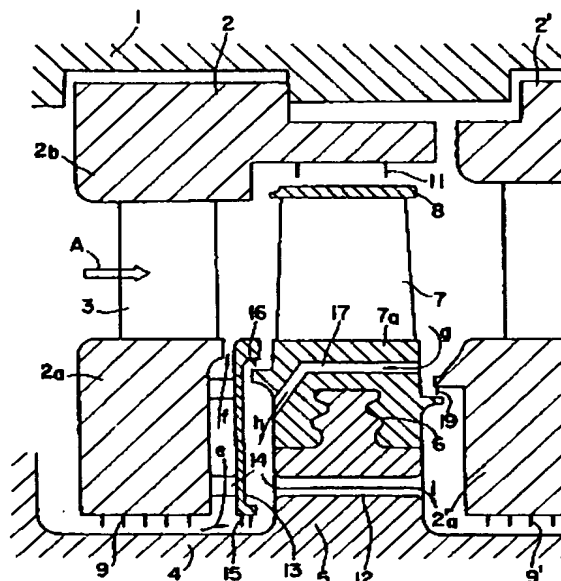
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APPLICANT : TOSHIBA CORP;

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TITLE : DISK COOLING DEVICE FOR STEAM
TURBINE



ABSTRACT : PURPOSE: To make localized cooling possible for disk and blade root area by installing a heat resisting plate, between the inner ring of a nozzle diaphragm and a disk, to lead leaking steam from labyrinth fins to the blade side.

CONSTITUTION: Subject cooling device has a nozzle diaphragm 2 fixed to the inner casing 1 to form a steam pass and a rotor 4 provided with blades 7 and installed down stream in such a way as to allow rotation thereof within the inner casing 1. The gap inbetween is sealed by labyrinth fins 9. Steam passing blade 7 is to be led into a lead hole 12 for cooling steam passage drilled through blade supporting disk 5 of the rotor 4 so as to cool disk 5 and the blade root area 6. In this case, a heat resisting plate 13 is to be fixed to the nozzle diaphragm inner ring 2a by means of fixtures 14 between the inner ring 2a and the disk 5 to have the hot leaking steam from the labyrinth fins 9 led into blade 7 side in order to have the cooling performed in an efficient manner.

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